



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
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D5162-041
Job Sheet 198414



Part No: D5162-041

Job Qty: 1 pcs

Part Name: Seat Structure Assembly



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/26/19

Job Tracking No:

Due Date: 8/15/19

Created By: Jennifer Renwick

Type: SOLD

Description: Order 18344

Note: DWG D3016 REV (DEO) A1, D5162 REV A, D5189 REV A, D3017 REV C IPP REV:A 14.11.05 NEW ISSUE
DD VERF:JLM IPP REV:B 15-02-06 AS PER DWG REV:A DD VERF:JLMIPP REV:C 16.08.31 ADD D3016
PARTS DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Large Fab - Welded Assy-1	1 pcs	8/15/19		24.00	4.63	Large Fab - 1		
							Large Fab - 10		
							Large Fab - 2		
							Large Fab - 3		
							Large Fab - 4		
							Large Fab - 5		
							Large Fab - 6		
							Large Fab - 7		
							Large Fab - 8		
							Large Fab - 9		
							Large Fab - 11 (Various)		
140	QC 5	1 pcs	8/15/19		0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
							QC 5 - 61		
							QC 5 - 81		

BAS
40
9-88

SEP 03 2019



Container No: S210844



Part: D5162-041

Job No: 198414

Serial No/Batch: S210844

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.
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CANADA
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Email: sales@dartaero.com
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Date: 09/03/19

Plex 7/31/19 9:12 AM Dart.lajeunesse.marie

165 Large Fab - Welded Assy-2-B4B	1 pcs	8/15/19	0.00 4.63	Large Fab - 1 - B4B	
				Large Fab - 10 - B4B	
				Large Fab - 2 - B4B	
				Large Fab - 3 - B4B	
				Large Fab - 4 - B4B	
				Large Fab - 5 - B4B	
				Large Fab - 6 - B4B	
				Large Fab - 7 - B4B	
				Large Fab - 8 - B4B	
				Large Fab - 9 - B4B	
				Large Fab - 11 - B4B (Various)	
170 QC 9	1 pcs	8/15/19	0.00 0.00	QC 9 - 10	 
				QC 9 - 18	
				QC 9 - 24	
				QC 9 - 43	
				QC 9 - 50	
				QC 9 - 9	
175 QC 5	1 pcs	8/15/19	0.00 0.00	QC 5 - 10	 
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
180 Handfinish - 1-1 Chemical-B4B	1 pcs	8/15/19	0.00 0.47	Handfinish - 1 - 1 - B4B	
				Handfinish - 1 - 2 - B4B	
				Handfinish - 1 - 3 - B4B	
				Handfinish - 1 - 4 - B4B	
				Handfinish - 1 - 5 - B4B	
				Handfinish - 1 - 6 - B4B	
				Handfinish - 1 - 7 - B4B	
				Handfinish - 1 - 8 - B4B	
				Handfinish - 1 - 9 - B4B	
				Handfinish - 1 - 10 - B4B	
				Handfinish - 1 - 11 - B4B	
				Handfinish - 1 - 12 - B4B	
				Handfinish - 1 - 13 - B4B	
				Handfinish - 1 - 14 - B4B	
				Handfinish - 1 - 15 - B4B	
				Handfinish - 1 - 16 - B4B	
				Handfinish - 1 - 17 - B4B	
				Handfinish - 1 - 18 - B4B	
				Handfinish - 1 - 19 - B4B	
				Handfinish - 1 - 20 - B4B	
				Handfinish - 1 - 21 - B4B	
				Handfinish - 1 - 22 - B4B	

190 QC 7	1 pcs	8/15/19	0.00 0.00	QC 7 - 10	
				QC 7 - 13	
				QC 7 - 14	
				QC 7 - 15	
				QC 7 - 17	
				QC 7 - 18	
				QC 7 - 19	
				QC 7 - 2	
				QC 7 - 28	
				QC 7 - 3	
				QC 7 - 30	
				QC 7 - 34	
				QC 7 - 36	
				QC 7 - 37	
				QC 7 - 41	
				QC 7 - 47	
				QC 7 - 48	
				QC 7 - 51	
				QC 7 - 58	5mD
				QC 7 - 59	19/9/14
				QC 7 - 60	
				QC 7 - 9	
				QC 7 - 68	
				QC 7 - 50	
				QC 7 - 67	
				QC 7 - 40	
				QC 7 - 24	
				QC 7 - 43	
				QC 7 - 61	
				QC 7 - 81	
200 Small Fab - 2 - B4B	1 pcs	8/15/19	0.00 1.00	Small Fab - 1 - B4B	5m/s 19/9/14
				Small Fab - 2 - B4B	
				Small Fab - 3 - B4B	
				Small Fab - 4 - B4B	
				Small Fab - 5 - B4B	
				Small Fab - 6 - B4B	
				Small Fab - 7 - B4B	
210 QC 5	1 pcs	8/15/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	2308
				QC 5 - 40	SEP 5 2019
				QC 5 - 61	
				QC 5 - 81	
220 Powdercoat - 3 Grey Sand - B4B	1 pcs	8/15/19	0.00 0.29	Powdercoat - 1 - B4B	
				Powdercoat - 2 - B4B	
				Powdercoat - 3 - B4B	

M13889

START: 8:55 OUT: 3:30 FINISH: 9:25

BL 19-95

230 QC 3	1 pcs	8/15/19	0.00 0.00	Powdercoat - 4 - B4B	
				QC 3 - 10	
				QC 3 - 13	
				QC 3 - 15	
				QC 3 - 17	
				QC 3 - 18	
				QC 3 - 2	
				QC 3 - 28	
				QC 3 - 3	
				QC 3 - 30	
				QC 3 - 34	
				QC 3 - 36	
				QC 3 - 41	
				QC 3 - 51	
				QC 3 - 58	smf 10/9/5
				QC 3 - 59	
				QC 3 - 68	
				QC 3 - 9	
				QC 3 - 40	
				QC 3 - 19	
				QC 3 - 43	
				QC 3 - 24	
				QC 3 - 61	
				QC 3 - 81	
240 Small Fab - 3 - B4B	1 pcs	8/15/19	0.00 1.00	Small Fab - 1 - B4B	smf 10/9/5
				Small Fab - 2 - B4B	
				Small Fab - 3 - B4B	
				Small Fab - 4 - B4B	
				Small Fab - 5 - B4B	
				Small Fab - 6 - B4B	
				Small Fab - 7 - B4B	
250 QC 5	1 pcs	8/15/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	DAS 30 9-89
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
260 Packaging 3-1 - Stock - B4B	1 pcs	8/15/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	DAS 30 9-89
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	

				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
270 QC 21 - SA		1	8/15/19	0.00 0.00	QC 21 - SA - 21
		pcs			QC 21 - SA - 70
					QC 21 - SA - 53

DAG

21

SEP 05 2019

Part Op 110 - (Weld per dwg A/R 4130 rod Batch: M12772) FABRICATE D3017-041 AS PER DWG: USE DT8598 FOR DESCRIPTIONS: BENDING D3017-1/3 TUBE. USE DT8621 FOR DRILLING (#30 DRILL) BACK FRAME. ***DO NOT OPEN HOLES IT WILL BE DONE AT FUTHER STEP*** USE DT8622 FOR DRILLING (#30 DRILL) D3017-5. ***DO NOT OPEN HOLES IT WILL BE DONE AT FUTHER STEP*** USE DT8598 JIG FOR WELDING TUBES, LUGS AND ONE END CAP, OTHER END CAP WILL BE WELDED AFTER OPENING HOLES.

140 - (QC5- Inspect part completeness to step on W/O)

165 - (Weld per dwg A/R 4130 rod Batch: M12772) 1- BOLT SEAT FRAME TO ASSEMBLY PLATE DT8624. 2- TRANSFER DRILL D5189-041 TO D3016-041 AS PER DWG USING #30 DRILL AND CLECO THEN DRILL TO FINISH SIZE. 3- TRANSFER DRILL SEAT PAN TO D5189-041 AND 3016-041. 4- TRASFER DRILL SEAT AND D3016-041 TO D3017-041 USING DT AND USING TOOL TO ACHIEVE DESIRED ANGLE ON BACK REST. ARMREST: 1- ASSEMBLE AND TRANSFER DRILL D5189-043 TO D3017-041. OPEN HOLES TO FINISH SIZE AS PER DWG SEAT BRACE: 1- USE DT10132 AND DT10133 TO TRANSFER DRILL HOLES IN SEAT PAN AND SEAT BRACE.

170 - (QC9- Inspect visual per QSI004- Fusion Welds)

175 - (QC5- Inspect part completeness to step on W/O)

180 - (Chemical Conversion Coat per QSI005 4.1), CHEMICAL CONVERSION SEAT PANEL D3022-1 AND BACK PANEL D3023-1 AS PER DWG

190 - (QC7-Inspect Chemical Conversion Coat)

200 - (TO FABRICATE D5162-051) ASSEMBLE D3023-1 PANEL TO D3017-041 BACK FRAME AS PER DWG D5162-051

210 - (QC5- Inspect part completeness to step on W/O)

220 - (Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3), POWDER COAT ALL INDIVIDUAL PARTS START TIME:

OVEN TEMPERATURE: FINISH TIME:

230 - (QC3- Inspect Part Finish)

240 - ASSEMBLE AS PER DWG

250 - (QC5- Inspect part completeness to step on W/O)

260 - (Identify as per dwg & Stock Location:)

270 - (QC21- Final Inspection - Work Order Release)

01178

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2199-31	Strut Details	1 pcs (1 ea)	110-Large Fab - Welded Assy-1	5152779
D3016-1	Tube	2 pcs (2 ea)	110-Large Fab - Welded Assy-1	5203063
D3016-11	Saddle	2 pcs (2 ea)	110-Large Fab - Welded Assy-1	5202901
D3016-3	Tube	4 pcs (4 ea)	110-Large Fab - Welded Assy-1	5202311
D3016-5	Tube	2 pcs (2 ea)	110-Large Fab - Welded Assy-1	5203373
D3016-7	Tube	4 pcs (4 ea)	110-Large Fab - Welded Assy-1	5204180
D3016-9	Saddle	2 pcs (2 ea)	110-Large Fab - Welded Assy-1	5202908
D5159-041	Seat Back Brace Assembly	1 pcs (1 ea)	110-Large Fab - Welded Assy-1	5179641
D5159-043	Seat Back Brace Assembly	1 pcs (1 ea)	110-Large Fab - Welded Assy-1	5179703
D5159-045	Seat Rib Assembly	1 pcs (1 ea)	110-Large Fab - Welded Assy-1	5209373
M4130NT0.750W.049	4130 Round Tube .750 X.049W	13.8000 ft (13.8 ea)	110-Large Fab - Welded Assy-1	5155281
M4130NT0.750W.083	4130 Round Tube .750 X.083W	2.5000 ft (2.5 ea)	110-Large Fab - Welded Assy-1	507141
D3016-13	Bracket	2 pcs (2 ea)	110-Large Fab - Welded Assy-1	5103110
D3016-15	Gusset	2 pcs (2 ea)	110-Large Fab - Welded Assy-1	5103100
D3016-17	Gusset	2 pcs (2 ea)	110-Large Fab - Welded Assy-1	5103200
D3017-11	Cap	4 pcs (4 ea)	110-Large Fab - Welded Assy-1	5019161
D3017-7	Lug	3 pcs (3 ea)	110-Large Fab - Welded Assy-1	5103092
D3020-1	Fitting	4 pcs (4 ea)	110-Large Fab - Welded Assy-1	5203069
D3022-1	Seat Pan	1 pcs (1 ea)	110-Large Fab - Welded Assy-1	5206485
D3023-1	Back Panel	1 pcs (1 ea)	110-Large Fab - Welded Assy-1	5206483
D4667-041	Armrest Stud Assembly	1 pcs (1 ea)	110-Large Fab - Welded Assy-1	5162717
D5190-1	Armrest Fitting	1 pcs (1 ea)	110-Large Fab - Welded Assy-1	6025169
D5190-3	Weld Pin	1 pcs (1 ea)	110-Large Fab - Welded Assy-1	3146053
GA010 WAC03-10 MS20600-AD4W2	Rivet	40 Ea (40 ea)	200-Small Fab - 2 - B4B	5203371
MS20600-AD4W3	Cherry Rivet	6 Ea (6 ea)	200-Small Fab - 2 - B4B	5194326
AN3-12A	Bolt	3 Ea (3 ea)	240-Small Fab - 3 - B4B	5116926
AN4-14A	Bolt	2 Ea (2 ea)	240-Small Fab - 3 - B4B	5188270
AN4-4A	Bolt	1 Ea (1 ea)	240-Small Fab - 3 - B4B	5193716
AN4-6A	Bolt	1 Ea (1 ea)	240-Small Fab - 3 - B4B	5192116
AN970-4	Washer	1 Ea (1 ea)	240-Small Fab - 3 - B4B	5106169-1
D3024-1	Spacer	3 pcs (3 ea)	240-Small Fab - 3 - B4B	5162587
D3031-1	Loop	2 pcs (2 ea)	240-Small Fab - 3 - B4B	5207585
MS20600-AD4W4	Rivet	4 Ea (4 ea)	240-Small Fab - 3 - B4B	5207585
MS20600-AD4W5	Blind Rivet	8 Ea (8 ea)	240-Small Fab - 3 - B4B	fm13168
MS21042L3	Nut	17 Ea (17 ea)	240-Small Fab - 3 - B4B	5204283
MS21042L4	Nut	8 Ea (8 ea)	240-Small Fab - 3 - B4B	5211536
MS24693-S272	Screw	4 Ea (4 ea)	240-Small Fab - 3 - B4B	5192116
MS27039-1-17	Screw (601.1954) fm121814	1 Ea (1 ea)	240-Small Fab - 3 - B4B	5192116
MS27039-1-18	Screw	3 Ea (3 ea)	240-Small Fab - 3 - B4B	5192116
MS27039-1-19	Screw	4 Ea (4 ea)	240-Small Fab - 3 - B4B	5192116
MS27039-1-20	Screw 318870	2 Ea (2 ea)	240-Small Fab - 3 - B4B	5192116
MS27039-4-20	Screw 5180206	4 Ea (4 ea)	240-Small Fab - 3 - B4B	5192116
MS27039-4-21	Screw 5155573	2 Ea (2 ea)	240-Small Fab - 3 - B4B	5192116
NAS1149D0332J	Washer	30 Ea (30 ea)	240-Small Fab - 3 - B4B	5209100
NAS1149D0432J	Washer	17 Ea (17 ea)	240-Small Fab - 3 - B4B	5093756
NAS43DD4-16FC	Spacer	2 Ea (2 ea)	240-Small Fab - 3 - B4B	5156882

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
110-Large Fab - Welded Assy-1	D2199-31	1	6	0
	D3016-1	2	12	0
	D3016-11	2	4	0
	D3016-13	2	10	0
	D3016-15	2	20	0
	D3016-17	2	32	0
	D3016-3	4	8	0
	D3016-5	2	4	0
	D3016-7	4	4	0
	D3016-9	2	4	0
	D3017-11	4	13	0
	D3017-7	3	9	0
	D3020-1	4	8	0
	D3022-1	1	0	0
	D3023-1	1	0	0
	D4667-041	1	18	0
	D5159-041	1	3	0
	D5159-043	1	3	0
	D5159-045	1	1	0
	D5190-1	1	12	0
	D5190-3	1	8	0
	M4130NT0.750W.049	14	93	0
	M4130NT0.750W.083	3	27	0
	MS20600-AD4W2	40	125	0
	MS20600-AD4W3	6	880	0
200-Small Fab - 2 - B4B	AN3-12A	3	204	0
240-Small Fab - 3 - B4B	AN4-14A	2	464	0
	AN4-4A	1	59	0
	AN4-6A	1	423	0
	AN970-4	1	51	0
	D3024-1	3	34	0
	D3031-1	2	6	0
	MS20600-AD4W4	4	1,728	0
	MS20600-AD4W5	8	75	0
	MS21042L3	17	852	0
	MS21042L4	8	2,669	0
	MS24693-S272	4	204	0
	MS27039-1-17	1	34	0
	MS27039-1-18	3	1,119	0
	MS27039-1-19	4	399	0
	MS27039-1-20	2	84	0
	MS27039-4-20	4	78	0
	MS27039-4-21	2	51	0
	NAS1149D0332J	30	2,553	0
	NAS1149D0432J	17	164	0
	NAS43DD4-16FC	2	51	0
Part Specifications				
Specifications could not be found.				

Plex 7/31/19 9:12 AM Dart.lajeunesse.marie



Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____		DISPOSITION				DEPARTMENT/PROCESS			
Part No. _____		Rework ☐ Scrap ☐ Use-as-is ☐				Cross tube ☐ Small Fab ☐ Finishing ☐ Skid-tube ☐ Machining ☐ Large Fab ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date: _____	Sequence #: _____	QTY Affected: _____		MRB (QS1042)					
Description Work Order Deviation		Disposition		Completed By					
				Lead hand / Supervisor					
				QC / QA Coordinator					
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY							
		Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Other/Details: _____							
		Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐							
		Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐							
		Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread ☐							